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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/325,189	06/03/99	KINJO	M 990360/LH

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HM12/0425

EXAMINER

TUNG, J

ART UNIT	PAPER NUMBER
1656	

DATE MAILED: 04/25/01

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/325,189

Applicant(s)

Kinjo

Examiner

Joyce Tung

Group Art Unit

1656



☒ Responsive to communication(s) filed on 1/30/01

☒ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claims

☒ Claim(s) 1-38 is/are pending in the application.

Of the above, claim(s) 9-38 is/are withdrawn from consideration.

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-8 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☒ Claims 1-38 are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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***Response to Amendment***

1. The amendment filed 1/30/2001 has been entered except that the amendment on page 12, line 26 of the specification has not been entered because there is no "of" on line 26. It is suggested to clarify uncertainty.
2. The rejection of claims 1-8 under 35 U.S.C. §112, second paragraph rejection is withdrawn because of the amendment.
3. Regarding the rejection of claims 1-8 under 35 U.S.C. §103(a) over Mullis et al. in view of Clive et al., the response argues that by combining the methods of Mullis et al. and Clive et al. electrophoresis must be performed to detect the amplified nucleic acid sequence and in the present invention, electrophoresis is not required to detect and quantify the amplified nucleic acid sequence. More specifically, a specific nucleic acid is detected and quantified by monitoring migration of a marker molecule integrated in the amplified nucleic acid sequence. Applicant's arguments filed 1/30/2001 have been fully considered but they are not persuasive, because, it is unclear how the migration distance of the marker molecule integrated in the amplified nucleic acid sequence is monitored and determined in accordance with an autocorrelation based upon the description of the specification. Thus, the rejection is maintained.
4. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mullis et al. (4,965,188) in view of Clive et al. (J. Neurosci. Methods, 1998, Vol. 81, pg. 25-34).

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***NEW GROUNDS OF REJECTION***

***Claim Rejections - 35 U.S.C. § 112***

5. claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Since the specification does not describe how to analyze a target nucleic acid sequence by measuring a migration distance of the amplified nucleic acid labeled with the marker molecule by applying fluorescence correlation spectroscopy, it constitutes new matter.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claims 1-8 are vague and indefinite because of the language "micro detection field" in claim 2. It is unclear how the language is defined in the specification.

b. Claims 1-8 are vague and indefinite because of the language "migration distances" in claims 3 and 4. It is unclear how the language is defined in the specification.

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8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Joyce Tung whose telephone number is (703) 305-7112. The examiner can normally be reached on Monday-Friday from 8:00 AM-4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones can be reached at (703) 308-1152.

Any inquiries of a general nature or relating to the status of this application should be directed to the Chemical/Matrix receptionist whose telephone number is (703) 308-0196.

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10. Papers related to this application may be submitted to Group 1600 by facsimile transmission. Papers should be faxed to Art Unit 1656 via the PTO Fax Center located in Crystal Mall 1 using (703) 305-3014 or 308-4242. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989).

Joyce Tung

April 17, 2001

A handwritten signature in black ink, reading "Eggerton A. Campbell". The signature is written in a cursive, flowing style.

**EGGERTON A. CAMPBELL  
PRIMARY EXAMINER**